## PATENT COOPERATION : EATY

To:	-			PCT  WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43 bis.1)  Date of malling (day/month/year) see form PCT/ISAZ10 (second sheet)					
	see form f	PCT//SA/220							
	licant's or agent's file			FOR FURTHER ACTION See paragraph 2 below					
Inte	rnational application l	No.	International filing date (d		Priority date (day/month/year)				
	T/CA2004/000669		03.05.2004		02.05.2003				
	mational Patent Class 6F1/00	sification (IPC) or	both national classification	and IPC	• The state of the				
App	licant	a							
	MED, Ahmed Aw	ad El-Sayed							
n	<u> </u>								
1.	This opinion co	ntains indicati	ons relating to the follo	owing items:					
	⊠ Box No. I	Basis of the or	ninion						
	Box No. II	Priority	Jilliott						
	Box No. III	•	ment of opinion with rea:	ard to novelty, inve	entive step and industrial applicability				
	Box No. IV	Lack of unity of			The step 2/10 moostilat applicationty				
	Ø Box No. V								
	☐ Box No. VI								
	Box No. VII	VII Certain defects in the international application							
	Box No. VIII	Certain obser	ations on the internation	al application					
2.	FURTHER ACTI	ON		•					
If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.									
If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.									
For further options, see Form PCT/ISA/220.									
3.	For further detail	ls, see notes to	Form PCT/ISA/220.						
Ner	ne and mailing addre	ss of the ISA		Authorized Office	r				
, <del>-</del>	European NL-2280 F Tel +31 7			Powell, D					

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CA2004/000669

	Box N	o. I Basis of the opinion							
1.		With regard to the language, this opinion has been established on the basis of the international application in the language in which it was field, unless otherwise indicated under this item.							
	la	This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).							
2.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:								
	a. type	of material:							
		a sequence listing							
		table(s) related to the sequence listing							
b. format of material:									
		in written format							
		in computer readable form							
	c. time	of filing/furnishing:							
		contained in the international application as filed.							
		filed together with the international application in computer readable form.							
		furnished subsequently to this Authority for the purposes of search.							
3.	ha co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional upies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.							
4.	. Additional comments:								

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CA2004/000669

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	Box N	o. II	Priority							
1.	⊠ T	he fol								
			translation of the earli	er appl	ication who	se priority has been claimed (Rule 43 <i>b</i>	is.1 and 66.7(b)).			
	Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.									
2.	h	This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.								
3.	Additional observations, if necessary:  Box No. V Reasoned statement under Rule 43bls.1(a)(i) with regard to novelty, inventive step or									
_	Indus	trial				s supporting such statement				
1.	Stater	nent								
	Novel	ovelty (N)		Yes: No:	Claims Claims	6,7,9,10,16,17,20,21 1-5,8,11-15,18,19				
	Invent	ventive step (IS)		Yes: No:	Claims Claims	1-21				
	Indust	rial a	pplicability (IA)	Yes: No:	Claims Claims	1-21				

2. Citations and explanations

see separate sheet

## Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1. The following documents are referred to in this communication:
- D1: US-A-5 557 686 (BROWN MARCUS E ET AL) 17 September 1996 (1996-09-17)
- D2: US-A-5 768 387 (AKIYAMA RYOTA ET AL) 16 June 1998 (1998-06-16)
- 2. INDEPENDENT CLAIM 1
- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.
- 2.2 Document D1 discloses (the references in parenthesis applying to this document): a behavioral biometrics based user verification system for use with a motion based input device, said system comprising a data interception unit for receiving inputs from a user ("first collecting samples containing typing characteristics of an authorized user ... based on key press times and key release times", column 2, lines 15-19. wherein the skilled person would understand from reading D1 as a whole that said motion is in an axial direction in this case), a behavior analysis unit operatively coupled to said data interception unit ("vectors are constructed ... for purifying the samples", column 2, lines 20-22), and a behavior comparison unit operatively coupled to said behavior analysis unit, wherein said system translates behavioral biometrics information into representative data ("the neural network is trained to output whether an input is from an authorized user", column 2, lines 28-29), stores and compares different results, and outputs a user identity result ("the user types the previously determined keystroke sequence ... into the neural network. ... The neural network is then used to determine whether ... the user is authorized", column 2, lines 30-32 and 36-38). Therefore, the subject-matter of independent claim 1 is considered not new.
- 3. INDEPENDENT CLAIM 11

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 11 is not new in the sense of Article 33(2) PCT.
- 3.2 The same reasoning as stated with respect to claim 1 applies, mutatis mutandis, to the subject-matter of the corresponding independent claim 11, which therefore is also considered not new.
- 4. DEPENDENT CLAIMS 2-10, 12-21
- 4.1 Dependent claims 2-10, 12-21 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), see documents D1 and D2 and the corresponding passages cited in the search report.